



SANCID SYMPOSIUM 2018

13 -15 November 2018

Ingwenyama Conference & Sports Resort
White River, Mpumalanga, South Africa

“Opportunities to Manage Climate Change”

Programme

Tuesday, 13 November 2018

10:00 – 11:00 Registration

11:00 - 12:30 Session 1- Chair: Prof Sylvester Mpandeli

11:00 –11:05 Opening Address

Dr J Stevens: SANCID: Chairman

11:05 –11:15 **Welcome Address Provincial**

Ms SP Xulu: Head of Department, Mpumalanga Department of Agriculture

11:15 – 11:30 **Welcome Address National**

Mr MM Mlengana: Director General, Department of Agriculture, Forestry & Fisheries

11:30 –12:00 **Keynote Address**

Mr F Reinders: International Commission on Irrigation and Drainage (ICID) President

12:00 – 12:30 **Invited Paper:** Research based innovation for effective water management and food production

Dr GR Backeberg: Executive Manager, Water Research Commission (WRC)

12:30 – 13:00 Lunch

13:00 – 15:05 Session 2- Chair: Dr Bongani Ncube

13:00 – 13:25 Policies and legal frameworks to advance smallholder irrigation in South Africa

BCM van Koppen

13:25 – 13:50 The establishment of school of excellence for irrigation in Taung

K Mabe

13:50 – 14:15 Regulations requiring that the taking of water for irrigation purposes be measured, recorded and reported

A Nefale

“Opportunities to Manage Climate Change”

- 14:15 – 14:40 Climate change and irrigated sugarcane production in South Africa: Threats, opportunities and uncertainties
A Singels and MR Jones
- 14:40 – 15:05 A system dynamics model to explore the role of community social dynamics on the adoption of agricultural innovations
A Jumman, C Bezuidenhout and M Dent

15:05 – 15:30 Refreshment break

15:30 – 17:35 Session 3- Chair: Ms. Mary-Jean Gabriel

- 15:30 – 15:55 Extent and characteristics of solar powered irrigation systems (SPIS) in South Africa
P Piliso, A Senzanje and K Dhavu
- 15:55 – 16:20 Effect of soil texture on soil water movement under moistube irrigation
EK Kanda, T Mabhaudhi and A Senzanje
- 16:20 – 16:45 Precision scheduling for water and salt management
SN Matthews and B Grové
- 16:45 – 17:10 Understanding the contribution of irrigated agriculture to river nitrogen and phosphorus loads in the Middle Olifants
L Mudaly and M van der Laan
- 17:10 – 17:35 Groundwater management as a climate change adaptation strategy in smallholder farming areas of Limpopo Province
S Shikwambana and B Ncube

19:00 Braai

Wednesday 14 November 2018

08:00 – 10:00 Session 4- Chair: Prof Sue Walker

- 08:00 – 08:25 A crop water use simulation-optimization approach to allocate limited water supplies at farm level
C Steyn and B Grové
- 08:25 – 08:50 Prospects for improving irrigated agriculture in southern Africa in a changing climate – Linking water, energy and food
T Mabhaudhi, S Mpandeli, D Naidoo, L Nhamo, VGP Chimonyo, C Nhemachena, A Senzanje and AT Modi
- 08:50 – 09:15 Perceptions of horticulturalists on climate change in central district, a case study in Tutume Village, Botswana.
MR Setlalekgomo, T Selebatso, and M Nkani
- 09:15 – 09:40 Impact of climate change on the transformation of the irrigation sector in South Africa
TE Manungufala
- 09:40 – 10:05 The role of a Virtual Irrigation Academy (VIA) to improve water productivity in Malawi, Tanzania and South Africa
J Stevens and A Sanewe

10:05 – 10:30 Refreshment break

10:30 – 12:00 Session 5- Chair: Dr Barbara van Koppen

- 10:30 – 10:55 Collaboration between grower and research organisations as a mechanism to improve water measuring and metering in commercial irrigated agriculture
S Slabbert, I van der Stoep and N Green
- 10:55 – 11:20 Applying APSIM for evaluating intercropping under rainfed conditions
VGP Chimonyo, T Mabhaudhi and AT Modi
- 11:20 – 11:45 Facebook and the farmer: Connecting with small-scale farmers via social media for improved irrigation management
R Hay and M van der Laan
- 11:45 – 12:10 Response farming using “AgriCloud” app for farmers in South Africa
S Walker, J Ferguson and F van der Burgt
- 12:10 – 12:20 Presentation: Mayo Macs Technical Tour
H Smit

12:20 – 13:00 Lunch

13:00 – 17:00 Technical tour

19:00 Gala Dinner

Thursday, 15 November 2018

08:00 – 10:00 Session 6- Chair: Mr Siboniso Mkhali

- 08:00 – 08:25 Integrating seasonal forecast information with crop models for improved climate variability management in small-scale farming systems of South Africa
S Mkuhlani and O Crespo
- 08:25 – 08:50 Measurement and modelling of the water requirements of apple orchards from planting until full-bearing age
S Dziki, T Volschenk, SJE Midgley, MB Gush, NJ Taylor, Z Ntshidi and NT Mobe
- 08:50 – 09:15 Alternate wetting and drying (AWD) irrigation technology: impact on the yield of rice grown with peri-urban anaerobic baffled reactor (ABR) effluents
TI Busari, A Senzanje, AO Odindo and CA Buckley
- 09:15 – 09:40 An electronic decision support system to determine the site-specific fitness-for-use of irrigation water
HM DU Plessis, JG Annandale and N Benade`
- 09:40 – 10:05 Using a risk based, site-specific decision support system to determine the suitability of mine water for irrigation
JG Annandale, HM du Plessis, PD Tanner and J Burgess

10:05 – 10:30 Refreshment break

10:30 – 13:00 Session 7- Chair: Dr Gerhard Backeberg

- 11:00 – 11:25 Understanding South African consumers’ preferences and market potential for environmentally sustainable products: Implications of water and carbon footprint labels
E Owusu-Sekyere, YY Mahlathi and H Jordaan
- 11:25 – 11:50 Mitigating climate change impacts through the Water-Energy-Food nexus
S Mpandeli, D Naidoo, Mabhaudhi, C Nhemachena, L Nhamo and S Liphadzi
- 11:50 – 12:15 Conservation agriculture: Towards achieving food security among rural smallholder communities
MC Matlou, DH Mayindi, BB Sithole KW Mashabane and IIC Wakindiki

12:15 – 12:40 Water footprint of tobacco production in South Africa: Implications for water use policies at a farm level

NA Motaung, E Owusu-Sekyere and H Jordaan

12:40 – 13:05 Reviewing the impact of governance on the effectiveness of revitalization of small-holder irrigation schemes in South Africa

F Rabothata

13:05 – 13:15 Closing: Prof S Mpandeli

13:15 – 14:00 **Lunch**

14:00 Depart